

We've finished the April 21, 2015 Bulletin 120 (B120) forecast update. The forecast includes observed conditions through the morning of April 21, 2015. The forecast is posted at <http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up>.

#### **Forecast Summary:**

The projected median April-July runoff in the major Sierra river basins ranges from 5 percent of normal on the Tule River to 43 percent of normal for the Total Inflow to Shasta Lake and the Sacramento River above Bend Bridge forecast points. Statewide, the forecasts dropped an average of 3 percent of normal from the April 14, 2015 B120 update forecast. The forecast for the Total Inflow to Shasta Lake and the Sacramento River above Bend Bridge had the greatest percent of normal drop of 4 percent. The 90 percent exceedance forecast for all rivers is less than 15 percent of normal with the exception of Total Inflow to Shasta Lake, Sacramento River above Bend Bridge, and Feather River.

#### **Runoff:**

Through the first 20 to 21 days of April, all rivers in the Sierra are flowing at or below 25 percent of normal with the exception of Total Inflow to Shasta Lake and Sacramento River above Bend Bridge, which are both flowing at 33 percent of average. The lowest percent of average April flow is for the Tule River, which is flowing at a rate of about 4 percent of average.

#### **Precipitation:**

Precipitation for the 2015 water year accumulated at the following rates of average:

Region/Index	WY accumulated precipitation through April 23, 2015 Units = percent of average
Northern Sierra 8-Station Index	74 (33.0 inches)
San Joaquin 5-Station Index	40 (14.5 inches)
Tulare Lake 6-Station Index	41 (10.8 inches)

#### **Snowpack:**

The snowpack as of the morning of April 23, 2015 stands at the following (based on snow sensors):

Region	Snow Water Equivalent (inches)	% of April 1 Average	% of April 23 Average
Northern	0.8	3	4
Central	0.8	3	3
Southern	0.5	2	2
Statewide	0.7	3	3

Water year 2015 will set the new record low snowpack. Water years 2012, 2013, and 2014's Statewide percent of normal to date on April 23 were 54, 28, and 17, respectively. This year, it's 3 percent.

#### **Weather and Climate Outlooks:**

The six-day weather forecast indicates precipitation over the first three days of the forecast. A total of less than 0.75 inches of precipitation is expected over the North Coast and Northern Sierras through Saturday. Less than 1.0 inch of precipitation is expected through the Sacramento and San Joaquin River basin. Freezing levels will range from 7,000 to 13,000 for the State. Freezing levels will be lower for the first three days of the period.

The NWS Climate Prediction Center (CPC) one-month outlook for April, issued April 16, indicates equal chances of above or below normal precipitation Statewide. The same outlook predicts increased chances of above normal temperature Statewide.

The CPC three-month (May-June-July) outlook, issued April 16, indicates equal chances of above or below normal precipitation Statewide. The same outlook predicts increased chances of above normal temperature Statewide.

El Niño conditions are present. Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean. There is an approximately 70 percent chance that El Niño conditions will continue through Northern Hemisphere summer 2015, and a greater than 60 percent chance it will last through autumn.

**Next Update:**

The next Bulletin 120 and Water Supply Index forecasts for conditions as of May 1, 2015 will be available Friday, May 8, 2015. If you have any questions regarding this forecast or need guidance prior to the May 1<sup>st</sup> Bulletin 120, please contact a member of the Snow Surveys staff.